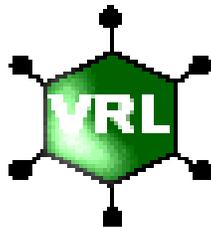


Weekly Influenza Surveillance Report



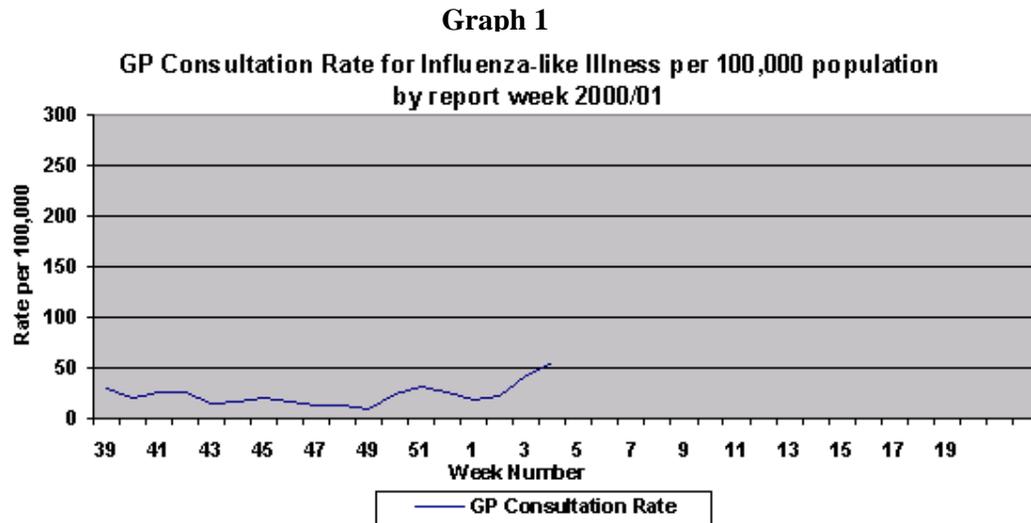
Week 4

Report produced: 01/02/01

Influenza activity in Ireland

Influenza activity has increased for the week ending the 28th of January 2001. For this period, 32 cases of influenza-like illness were seen by sentinel general practices. This corresponds to a rate of 56 cases per 100,000. The cases were concentrated in Clonmel, Co. Tipperary and in Dublin 15.

Reports were filed by all practices. The consultation rate for week 2 was 23 cases per 100,000 and week 3, 42 cases per 100,000. As this is the first year of the scheme, baseline values cannot be determined and no previous data is available for comparison.



Virological data

Results for week 3 (week ending 20th of January) that were pending have isolated 2 influenza A (H1N1) samples and 1 influenza B sample. This brings the total for week 3, to 7 influenza A (H1N1) isolates and 1 influenza B isolate.

From week 4, week ending the 27/01/01, 18 samples were received. Of these 6 were positive for influenza, comprising of 5 influenza A (H1N1) isolates and 1 case of influenza B. Results are pending on six other samples.

Serology results are pending and will be updated next week. Influenza positive results by serology may be due to:

- Influenza vaccination;
- Infection with influenza virus;
- Both

Therefore these results are used as indicators of the presence of influenza in the community in the same way that consultation rates for respiratory symptoms are used. Most importantly samples received from hospitals are not paired and therefore a rising or falling titre cannot be determined.

Table 1.

Influenza positive results by cell culture and / or polymerase chain reaction (PCR)
by type and subtype by report week for 2000/2001

Week number	Influenza A	Influenza A (H1N1)	Influenza A (H3N2)	Influenza B
40 (w/e 07/10/00)	2	1 (PCR,culture)	1(PCR)	0
41 (w/e 14/10/00)	0	0	0	0
42 (w/e 21/10/00)	0	0	0	0
43 (w/e 28/10/00)	0	0	0	0
44 (w/e 04/11/00)	0	0	0	0
45 (w/e 11/11/00)	0	0	0	0
46 (w/e 18/11/00)	0	0	0	0
47 (w/e 25/11/00)	0	0	0	0
48 (w/e 02/12/00)	2	0	0	0
49 (w/e 09/12/00)	1	1 (PCR)	0	0
50 (w/e 16/12/00)	2	1 (PCR)	1 (PCR)	0
51 (w/e 23/12/00)	3	2 (PCR,culture)	1 (PCR)	0
52 (w/e 30/12/00)	1	1 (PCR,culture)	0	0
1 (w/e 06/01/01)	2	2 (PCR,culture)	0	1 (PCR,culture)
2 (w/e 13/01/01)	5	5 (PCR)	0	0
3 (w/e 20/01/01)	7	7 (PCR)	0	1 (PCR)
4 (w/e 27/01/01)	5	5 (PCR)	0	1 (PCR)

Table 2

Influenza positive results by serology by type and by report week for 2000/2001

Week Number	Influenza A	Influenza B
40 (w/e 07/10/00)	0	0
41 (w/e 14/10/00)	0	0
42 (w/e 21/10/00)	5	0
43 (w/e 28/10/00)	2	1
44 (w/e 04/11/00)	3	0
45 (w/e 11/11/00)	3	0
46 (w/e 18/11/00)	0	0
47 (w/e 25/11/00)	1	0
48 (w/e 02/12/00)	4	0
49 (w/e 09/12/00)	4	0
50 (w/e 16/12/00)	2	0
51 (w/e 23/12/00)	3	0
52 (w/e 30/12/00)	0	0
01 (w/e 06/01/01)	0	0
02 (w/e 13/01/01)	4	0
03 (w/e 20/01/01)	4	0
04 (w/e 27/01/01)	Results pending	Results pending

Influenza activity in England, Scotland and Wales

Overall, the consultation rate for England was 45 cases per 100,000 for the week ending the 28th January. The regional breakdown comprises of: Northern region 52 per 100,000, Central region 50 per 100,000 and Southern region 37 per 100,000. Activity in Wales remains below the upper level set for baseline activity. Scotland reported a consultation rate for influenza –like illness at 52 per 100,000 (normal seasonal activity = 50 – 600 per 100,000). SCIEH reported outbreaks of influenza-like illness in three schools in one health board region. One case identified influenza B virus and testing of other cases is ongoing.

Virological data supplied by the ERNVL, reports that 19 isolates of influenza A (H1N1) and 17 isolates of influenza B were identified for the same period. Isolates of influenza B are on the rise. The majority of influenza A (H1N1) isolates are antigenically similar to the current vaccine strain. Two isolates were found to be more like an older H1N1 strain A/Bayern/7/95.

Influenza activity in Europe

EISS reports that for the week ending the 21st of January, isolates of influenza A and increasingly influenza B, were reported. Regional activity was reported in Germany and North of France. Local activity was reported in the South of France, Belgium and the Czech Republic.

Influenza activity in Canada

For the week ending the 20th of January, 3 regions reported widespread activity, 8 regions reported localised activity and 28 regions reported sporadic activity. Influenza

B remains the predominant circulating virus. All isolates of influenza A and B characterised to date are covered by this year's vaccine.

Influenza activity in the United States

The proportion of patient visits to sentinel physicians lies within baseline levels of 0 – 3% for the week ending the 20th of January. Twelve state and territorial health departments reported widespread activity, 18 reported regional activity and 19 reported sporadic activity.

Virological data reveals that 22% (n=398) of specimens tested by WHO and NREVSS laboratories were positive for influenza. Influenza A unsubtype accounted for 239 specimens, influenza A (H1N1) for 64 specimens and 95 specimens were isolated as influenza B viruses.

Antigenic characterisation reports that 93% of the influenza A (H1N1) isolates are similar to A/New Caledonia/20/99, which is contained in this year's vaccine. The remaining 3% of influenza A (H1N1) isolates were similar to A/Bayern/07/95-like viruses. The current vaccine cross- reacts well with this older H1N1 strain producing high titres of antibodies.

Influenza activity Worldwide

FluNet reports widespread activity in Germany, the Czech Republic and the Slovak Republic. Regional activity was reported in Switzerland and Belgium, Denmark and the United Kingdom, while Norway reported local influenza activity for the week ending the 27th of January.